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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

DILLON, SAMUEL A

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Technology Center 2100

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/683,752
Filing Date: October 10, 2003
Appellant(s): GOLD ET AL.

Bruce E. Dahl
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 20, 2007 appealing from the Office
action mailed February 26, 2007.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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(8) Evidence Relied Upon

5,535,335

Cox et al.

7-1996

Legato NetWorker Administrator's Guide, Release 6.0. August 2000. Legato Systems.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legato et al. ("Legato NetWorker Administrator's Guide") in view of Cox et al. (US Patent Number 5,535,335).

As per **Claims 1, 12 and 17**, but more specifically to **Claim 12**, Legato disclose a system ("NetWorker Storage Management", page 37) comprising:

logic, communicatively coupled to a user interface (*NetWorker administrator interface, page 93 "NW Server Statistics"*), to determine a status for each of a plurality of media jobs associated with a media job category (*commands mminfo and nsrmm, page 93*); and

wherein said user interface is further configured to provide the status indicators (*NetWorker administrator interface, page 93 "NW Server Statistics"*).

Legato does not disclose receiving a service level objective for a media job category and determining a status indicator for the media job category based on the service level objective and the status for each of the plurality of media jobs; and wherein

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said user interface is further configured to provide the status indicator for the media job category.

Cox discloses a service level objective (*column 2 lines 30-32*) for a media job category (*aggregate resource, column 2 lines 9-11*); determining a status indicator for the media job category based on the service level objective and the status for each of the plurality of media jobs (*column 2 lines 25-48*).

Legato and Cox are analogous art in that they both deal with a collection of items each having a status and those statuses being queried. At the time of the invention, it would have been obvious a person having ordinary skill in the art to modify Legato's device management system to support Cox's aggregate status reporting.

The motivation for doing so, as taught by Cox, would at least have been to provide an accurate assessment of the operability status of the aggregate resource (*Cox, column 4 lines 1-8*). Therefore, it would have been obvious to combine Legato's system with Cox's reporting for the benefit of a providing an accurate assessment of the system status, to obtain the invention of Claims 1-12.

As per Claim 2, 11 and 20, but more specifically to Claim 2, Legato and Cox disclose the method of Claim 1, wherein determining a status comprises determining whether each of the plurality of media jobs completed within a due time for each respective media job (*Legato, if the job completed then the status will not be "susp", page 141*).

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As per Claim 3, Legato and Cox disclose the method of Claim 1, wherein receiving a service level objective comprises receiving a first desired percentage of media jobs to be completed within a due time associated with the media job (*Cox, 2nd parameter, column 2 lines 38-48*).

As per Claim 4, 15-16 and 18, but more specifically to Claim 4, Legato and Cox disclose the method of Claim 3, wherein providing a status indicator comprises:

calculating a calculated percentage of the plurality of media jobs that were completed within the due time associated with the media job (*Cox, col. 2 lines 38-48*);

if the calculated percentage is less than the first desired percentage, providing a critical status indicator (*Cox, "severely degraded", column 2 line 45*).

As per Claim 5, Legato and Cox disclose the method of Claim 3, further comprising receiving a second desired percentage of media jobs to be completed within the due time associated with the media job, the second desired percentage greater than the first desired percentage (*1st parameter, column 2 lines 38-48*).

As per Claim 6, Legato and Cox disclose the method of Claim 5, wherein providing a status indicator comprises:

calculating a calculated percentage of the plurality of media jobs that completed within the due time associated with the media job (*Cox, value of*

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underlying real resource elements found in an unsatisfactory state, column 2 lines 38-48);

if the calculated percentage is less than the first desired percentage, providing a critical status indicator (Cox, "severely degraded", column 2 lines 38-48);

if the calculated percentage is greater than the first desired percentage and less than the second desired percentage, providing a warning status indicator (Cox, "degraded", column 2 lines 38-48); and

if the calculated percentage is greater than the second desired percentage, providing an OK status indicator (Cox, not degraded, column 2 lines 38-48).

As per **Claims 7 and 19**, but more specifically to **Claim 7**, **Legato** and **Cox** disclose the method of **Claim 1**, further comprising:

receiving a second service level objective comprising a desired percentage of media to have a known location (Legato, not in progress / inpro, page 140);

calculating a calculated percentage of media of a total number of media having a known location (Cox, column 2 lines 38-48); and

providing a second status indicator for media having a known location based on the calculated percentage and the second service level objective (Cox, column 2 lines 38-48).

As per Claim 8, Legato and Cox disclose the method of Claim 1, wherein providing a status indicator comprises providing one of a critical status, a warning status, and an OK status (*Cox, column 2 lines 38-48*).

As per Claims 9-10 and 14, but more specifically to Claim 9, Legato and Cox disclose the method of Claim 1, wherein the media job category comprises one of a media movement category, a device load category (*Legato, each status is of a device that had data loaded or attempted to load on it, page 140 paragraph 1*), and a scratch media initialization category.

As per Claim 13, Legato and Cox disclose the system of Claim 12, further comprising:

media job information comprising a plurality of media jobs associated with the media job category, each of the plurality of media jobs having a due time (*Legato, save sets, page 140*); and

wherein said logic is to determine the status using said media job information (*Legato, status is determined based on information from save sets, page 140*).

(10) Response to Argument

The Examiner notes the Applicant has cited and relied upon the old standard for 35 U.S.C. 103, and additionally notes that this standard has changed. See *KSR v. Teleflex*, 550 U.S. 127 S. Ct. 1727 (2007).

Regarding Claim 1, the Appellant contends (page 13): **“Significantly, nowhere does Cox ever describe data backup operations, much less specific issues relating to the management of media used to backup data.”**

The Examiner notes that Cox is not relied upon to describe data backup operations. Rather, Cox is relied upon for describing the determination of an aggregate status from each of a set of individual statuses, something that is considered reasonably pertinent to the particular problem with which the Appellant was concerned (*“Methods and systems are disclosed for providing a status indicator for a media job category. ... A status indicator is provided for the media job category based on the service level objective and the status of each of the media jobs”*, Appellant’s specification, para. 2).

Regarding Claim 1, the Appellant contends (page 14): **“The examiner’s obviousness rejections are erroneous in that neither Legato nor Cox provides the suggestion or incentive required to combine them in the manner urged by the examiner.”**

The Examiner respectfully disagrees with both the content and spirit of the Appellant’s assertion. Legato discloses a system where the status of each of a plurality of storage devices (*considered a resource*) involved in data backup operations is determined and either recorded or displayed (*Legato, “page 93, NS Server Statistics”*). Cox explicitly discloses that his method provides an accurate single assessment of the operability status of an aggregate resource (*Cox, column 4 lines 1-8*), that is, a

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collection of multiple resources. Accordingly, Cox is interpreted as explicitly stating that the motivation to make the combination would have been that it provides an accurate single assessment.

Additionally, Cox's entire invention is directed towards this aim, that of compiling a collection of indicators down to a single indicator. As such, Cox can be considered as implicitly implying that this pursuit is desirable for a system of multiple resources that each have an individual status, such as Legato's. Cox makes explicit reference to Downes et al. (*US Patent 4,769,761, see attached*) as being a prior art implementation of a system attempting to solve the same problem with which Cox was concerned. Downes discloses it being desirable to use an aggregate threshold system so as to only alert an operator during occasions of excessive error (*Downes, column 2 lines 38-46*).

Additionally, it is not necessary for the references to explicitly disclose the suggestion or incentive to combine. The suggestion or incentive to combine may also be found implicitly in the references or in the knowledge generally available to one of ordinary skill in the art. It would have been obvious to a person having ordinary skill in the art to recognize the desirability of creating a single status indicator for the entire collect of statuses. This single status indicator could be used to provide an overall summary of a system's status, which is useful for quick viewing, report generation, system summaries, notifications, etc. The combination would not modify or reduce the functionality of either system outside of connecting two fully functional systems together, as Cox is merely a reporting mechanism attached on top of Legato's storage system.

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Regarding Claim 1, the Appellant contends (*page 14*): **“(T)he examiner has failed to identify any suggestion or incentive in either Legato or Cox that would motivate a person having ordinary skill in the art to make the combination.”**

The Examiner respectfully disagrees, and notes that in the previous action the Appellant was provided an explicit motivation taken from Cox (*“Firstly ...”, page 3*), an implicit motivation backed with support (*“Secondly ...”, page 3*), and an assertion that the motivation would have been obvious to a person having ordinary skill in the art (*“Thirdly ...”, page 4*). The Appellant is directed above for further discussion.

Regarding Claim 1, the Appellant contends (*page 14*): **“Legato mentions no need for additional status monitoring. Consequently, Legato cannot be said to provide the suggestion or incentive to provide any additional functionality in this regard.”**

The Examiner notes that Legato has never been relied upon for a suggestion or incentive to combine with Cox. As stated above, the previous action contained an explicit motivation taken from Cox, an implicit motivation backed with evidentiary support, and an assertion that the motivation would have been obvious to a person having ordinary skill in the art. The Appellant is directed above for further discussion.

Regarding Claim 1, the Appellant contends (*page 14*): **“Cox makes no reference to data backup at all, much less identifies any problems or issues relating to the management of the backup process.”**

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The Examiner respectfully disagrees with what appears to be the Appellants interpretation of the requirements of the combination. Legato discloses data backup and also storing a status for each of the storage devices. Cox discloses creating an aggregate status from a set of statuses. The problem that Cox identifies and solves is that of maintaining an accurate awareness of the status of resources (*Cox, column 1 lines 21-23*). Cox does not need to make reference to data backup because **A)** Cox is not relied upon for any limitation relating to data backup, and **B)** Cox is considered analogous art because it is considered reasonably pertinent to the particular problem with which the appellant was concerned, as described above.

Regarding **Claim 1**, the Appellant contends (*page 15*): **“(T)he ‘status’ provided by Cox is *forward-looking and capacity-related*. ... In contrast, the ‘status indicator’ provided by the present invention is *backward-looking and performance-based*.”** (*Appellants emphasis*)

The Examiner notes that nowhere in the claim does it require the status indicator be “*backwards-looking and performance-based*”. Additionally, it also appears that neither of the phrases “*backwards-looking*” or “*performance-based*” appears in the specification.

The claim appears to attach to the status indicator only the requirements that it is “*for a user*”, it is “*for the media job category*”, and it is “*based on the service level objective and the status for each of the plurality of media jobs*”. None of these limitations appear to require the status indicator be “*backward-looking*” as opposed to “*forward-*

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looking", or require it to be "performance-based" rather than "capacity-based". Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Accordingly, the Appellant's claim language does not appear concerned with whether the status indicator is backward-looking or performance based, but rather whether it is for a user (*Cox, host operator, column 4 lines 48-53*), it is for a media job category (*Cox, aggregate status is representative of the aggregate resource, column 2 lines 9-11*) and it is based on the service level objective (*Cox, column 2 lines 30-32*) and the status for each of the plurality of media jobs (*Cox, column 2 lines 25-48*).

Even assuming, *in arguendo*, that the claims somehow required Cox's aggregate status be "backward-looking and performance-based", the Examiner respectfully disagrees with the Appellant's assertion that this is not disclosed by the combination. As both of those terms are not included in the specification, the Examiner will interpret them as requiring the status involve looking backwards in its generation and being at least partly the result of performance. Accordingly, Cox's aggregate status is based on the statuses of the resources it aggregates (*Legato's storage devices*), and these statuses can be based on the success of the backup (*Legato, "The NetWorker server assigns to each backed-up save set a status based on the success of the backup", status page 140*), which is interpreted as being both backwards-looking (*the success happened in the past*) and performance-based (*based on the success*).

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Regarding **Claim 1**, the Appellant contends (page 16): **“(T)he status would relate to aggregate resources, not to whether media jobs met any service level objective, because Cox provides no teachings in this regard.”**

The Examiner respectfully disagrees. An objective is interpreted as a goal, and a service level objective is interpreted as a goal that applies to services. Cox's takes the statuses of storage devices that store data (*perform a service*), and generates an aggregate states based on them and on stored parameter values (*Cox, column 2 lines 38-48*) that determine when the service has been degraded (*not 'degraded' being the goal*). The Examiner notes that this interpretation was included in the previous action but not directly contested.

Regarding **Claim 1**, the Appellant contends (page 16): **“(T)he combination would not result in a system wherein the status would be backward-looking and performance-based (as inherently required by the pending claims).”**

The Examiner notes that nowhere in the claims does it require the status be *“backwards-looking and performance-based”*. As discussed above, the claims do not inherently require the status be backwards-looking and performance-based. These two phrases appear nowhere in the claims or specification. Even assuming, *in arguendo*, that these requirements were indeed present, the Examiner respectfully disagrees with the Appellant's assertion. Cox's aggregate status is based on the statuses of the resources it aggregates (*Legato's storage devices*), and these statuses can be based on the success of the backup (*Legato, “The NetWorker server assigns to each backed-*

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up save set a status based on the success of the backup", page 140), which is interpreted as being both backwards-looking (the success happened in the past) and performance-based (based on the success).

Regarding **Claim 1**, the Appellant contends (page 16): **"(T)he examiner asserts that Cox's 'aggregate resource' is the same as a 'media job category'. This is not a reasonable construction of either term."**

The Examiner respectfully disagrees, and additionally notes that the primary support the Appellant provides for this argument is Cox's definition of an aggregate resource as *"a logical resource composed of or containing a number of real resources"*, while the Appellant's specification states that a media job category may include *"media jobs for managing media used to backup data"* (paragraph 12). At no point does the Appellant directly respond to the following interpretation provided in the previous action.

In short, an *"aggregate resource"* in the context of the motivated combination is interpreted as fulfilling the limitation *"a media job category"* by way of the following two interpretations: **A)** Legato's storage devices fulfill a role of saving data for a period of time, which is considered a media job; and **B)** Cox's aggregation of multiple resources (*Legato's storage devices*) into one aggregate resource is considered as collecting them into a single group, which leads this group to be considered a category of resources.

Regarding interpretation **A)**, Legato discloses a system of storage devices each having an individual status. Each storage devices uses their media (*internal storage*) to store data for a period of time (*their job*). This storing operation is considered a media

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job in that the job (*storing the data*) is performed by way of the utilization of the storage devices' media (*internal storage*). This appears consistent with the Appellant's definition of "a media job category". Accordingly, the Examiner considers Legato's disclosure of "a storage device fulfilling the role of storing data for a period of time" as fulfilling the limitation "a media job".

Regarding interpretation **B**), Cox discloses creating an aggregate resource out of many individual resources. This effectively creates a group of resources sharing the same quality: "*being included in the aggregate resource*". A group of items sharing the same quality is considered as being a category of the items having that quality. By way of an analogy, take the example of a box containing numerous apples. Several apples are removed and placed in another box labeled "*Send to Cousin Eddie*". Each of those apples could then be considered as belonging to the category of apples that will be sent to Cousin Eddie.

In summary, an "*aggregate resource*" is interpreted as fulfilling the limitation "a media job category" because Legato's storage devices' activities can be considered a media job and Cox's aggregate resource is considered as a category of resources, where the resources in question are the storage devices.

As per **Claim 1**, the Appellant contends (*page 16*): "**Clearly, a 'category' is not a 'resource', nor can a media job category be equated to a 'resource'.**"

The Examiner notes the neither of these two equalities were made in the previous action. As stated in the previous action and above, the Examiner equates

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Legato's storage device activities as a media job, and Cox's aggregate resource as a category of resources. Per the motivated combination, the resources in question are the storage devices. Legato's storage devices perform the activity of storing data for a period of time, which is interpreted as a job (*storing data for a period of time*) pertaining to media (*the internal storage media is used to store the data*). Cox's aggregate resource has many resources included, and this inclusion provides a quality that differentiates those resources from other resources. Accordingly, every resource that is included in the aggregate resource can be considered as belonging to a certain category of resource (*those that are included in the aggregate resource*).

Regarding **Claims 2-11**, the Appellant contends (*page 17*): **"Dependant claims 2-11 are allowable over Legato and Cox at least because they depend from claim 1, which is allowable over Legato and Cox."**

The Examiner respectfully disagrees, and directs the Appellant to the discussion regarding **Claim 1** above.

Regarding **Claim 12**, the Appellant contends (*page 17*): **"(N)either reference (Legato or Cox) provides the suggestion or incentive required to combine them in the manner required."**

The Examiner respectfully disagrees. As noted above with respect to **Claim 1**, the Appellant was provided an explicit motivation taken from Cox, an implicit motivation backed with evidentiary support, and an assertion that the motivation would have been

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obvious to a person having ordinary skill in the art. The Appellant is directed above for further discussion.

Regarding **Claim 12**, the Appellant contends (*page 17*): **“The ‘status’ provided by Cox is forward-looking and capacity-related, whereas the ‘status indicator’ of the pending claims is backward-looking and performance-based.”**

The Examiner respectfully disagrees with the content and spirit of the Appellant's assertion. As noted above with respect to **Claim 1**, nowhere in the claims does it require the status be *“backwards-looking and performance-based”*. These two phrases appear nowhere in the claims or specification. Even assuming, *in arguendo*, that these requirements were indeed present, Cox's aggregate status is based on the statuses of the resources it aggregates (*Legato's storage devices*), and these statuses can be based on the success of the backup (*Legato, page 140*), which is interpreted as being both backwards-looking (*the success happened in the past*) and performance-based (*based on the success*).

Regarding **Claim 12**, the Appellant contends (*page 17*): **“Cox's ‘aggregate resource’ is not a ‘media job category,’ this cannot meet the limitations of claim 12.”**

The Examiner respectfully disagrees. As stated in the previous action and with respect to **Claim 1** above, the Examiner equates Legato's storage devices activities as a media job, and Cox's aggregate resource as a category of resources, where the

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resources in question are the storage devices. Legato's storage device activities are interpreted as a job (*storing data for a period of time*) pertaining to media (*the internal storage media is used to store the data*). Cox's aggregate resource has many resources included, and this inclusion provides a quality that differentiates those resources from other resources. Accordingly, every resource that is included in the aggregate resource can be considered as belonging to a certain category of resource (*those that are included in the aggregate resource*).

Regarding **Claims 13-16**, the Appellant contends (*page 17*): **"Dependant claims 13-16 are allowable over Legato and Cox at least because they depend from claim 12, which is allowable over Legato and Cox."**

The Examiner respectfully disagrees, and directs the Appellant to the discussion regarding Claim 1 and Claim 12 above.

Regarding **Claim 17**, the Appellant contends (*page 17*): **"(N)either reference (Legato or Cox) provides the suggestion or incentive required to combine them in the manner required."**

The Examiner respectfully disagrees. As noted above with respect to Claim 1, the Appellant was provided an explicit motivation taken from Cox, an implicit motivation backed with evidentiary support, and an assertion that the motivation would have been

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obvious to a person having ordinary skill in the art. The Appellant is directed above for further discussion.

Regarding **Claim 17**, the Appellant contends (*page 17*): **“The ‘status’ provided by Cox is forward-looking and capacity-related, whereas the ‘status indicator’ of the pending claims is backward-looking and performance-based.”**

The Examiner respectfully disagrees with the content and spirit of the Appellant’s assertion. As noted above with respect to **Claims 1 and 12**, nowhere in the claims does it require the status be *“backwards-looking and performance-based”*. These two phrases appear nowhere in the claims or specification. Even assuming, *in arguendo*, that these requirements were indeed present, Cox’s aggregate status is based on the statuses of the resources it aggregates (*Legato’s storage devices*), and these statuses can be based on the success of the backup (*Legato, page 140*), which is interpreted as being both backwards-looking (*the success happened in the past*) and performance-based (*based on the success*).

Regarding **Claim 17**, the Appellant contends (*page 17*): **“Cox’s ‘aggregate resource’ is not a ‘media job category,’ this cannot meet the limitations of claim 17.”**

The Examiner respectfully disagrees. As stated in the previous action and with respect to **Claims 1 and 12** above, the Examiner equates Legato’s storage devices activities as a media job, and Cox’s aggregate resource as a category of resources,

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where the resources in question are the storage devices. Legato's storage device activities are interpreted as a job (*storing data for a period of time*) pertaining to media (*the internal storage media is used to store the data*). Cox's aggregate resource has many resources included, and this inclusion provides a quality that differentiates those resources from other resources. Accordingly, every resource that is included in the aggregate resource can be considered as belonging to a certain category of resource (*those that are included in the aggregate resource*).

Regarding **Claims 18-20**, the Appellant contends (*page 17*): **"Dependant claims 18-20 are allowable over Legato and Cox at least because they depend from claim 17, which is allowable over Legato and Cox."**

The Examiner respectfully disagrees, and directs the Appellant to the discussion regarding Claim 1 and Claim 17 above.

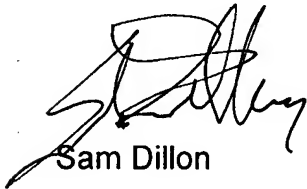
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

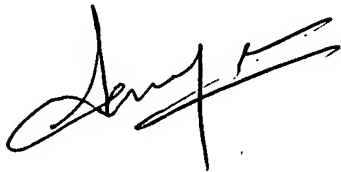
Respectfully submitted,



Sam Dillon

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Lynne H. Browne

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Attached:

Downes et al. (US Patent 4,769,761)